

hyp.....	Hypopharynx.
I, ang.....	Inner angle of mandible.
L.....	Labrum.
l.....	Lacinia.
lh.....	Labral hooks.
l. art.....	Labral articulation.
lig.....	Ligula.
Md.....	Mandible.
m. sh.....	Mandible sheet.
mx.....	Maxillary foramen.
1st. mx.....	1st Maxilla.
2d. mx.....	2d Maxilla, or labium.
O.....	Occiput.
of.....	Occipital foramen.
oe.....	Oesophagus.
p.....	Palpiger.
pl.....	Palpus.
sm.....	Sub-mentum.
sti.....	Stipes.
te.....	Taste palpi.
v.....	Vertex.

SOME NOTES ON THE PROVANCHER MEGACHILIDÆ.

By E. S. G. TITUS.

Through the kindness of Abbé V. A. Huard, Curator of the Museum of the Department de l'Instruction Publique, Quebec, Canada, I have had the opportunity of examining the specimens of the Megachilidæ (now in the Museum at Quebec) upon which Abbé Provancher based his determinations.

These specimens have been compared with the Cresson and other types at Philadelphia and with the collections in the National Museum at Washington.

The only references given are those of Abbé Provancher's articles and such others as directly relate to his writings.

The types of the new species unless otherwise stated are in the Museum at Quebec.

MEGACHILINÆ.

Megachile relativa Cresson.

1882: Le Naturaliste Canadien, v. XIII, p. 227, 232, n. 12, ♀
(*Megachile optiva* in part).

1883: Fauna Ent. Can. Hym. p. 710, 715, n. 12, ♀ (*Megachile ptiva* in part).

1888: Add. Fauna Ent. Can. Hym. p. 462 (*Megachile optiva* in part).

1898: Dalla Torre, Cat. Hym. v. X, p. 438, ♀ (Provancher references to *M. optiva* in part.)

One of the two female specimens under the number 877 appears to be referable to Cresson's *relativa* and has been compared with the type.

The clypeus is slightly emarginate, mandibles apparently 4-toothed slightly interrupted band on dorsal abdominal segment 4, bands widely, interrupted on segments 2 and 3, missing on first segment (rubbed), edges of abdominal segments with dense pubescence; tarsal claws each with a sharp basal tooth. Recorded by Provancher from "St. Hyacinth, Cap Rouge, etc."; it is of course impossible to determine from which of these localities the above specimen was taken.

Megachile leoni n. sp. ♀.

Same references as above given under *Megachile relativa* apply to this species, the specimen upon which it is founded being the other specimen of "*Megachile optiva*" in the Provancher collection. In general appearance it is near to *relativa*.

Length 9 mm. Pubescence of the insect white and yellow mixed (specimen very dirty); not as dense or as long on the clypeus as elsewhere, dorsal abdominal bands present and entire except on first segment which has the band slightly interrupted, last dorsal segment with rather long black pubescence, other dorsal segments with scattering black hairs on the disk, pubescence of scopa coarse, short and yellow, of tarsi bright orange; punctuation close and coarse, on clypeus not so close nor so deep as on remainder of head; mandibles 5-dentate, teeth obsolete and irregular; clypeus entire; tegulæ fuscous, wings slightly embrowned, transverse nervure before basal nervure; last two joints of front tarsi reddish, all the spurs reddish yellow, front claws with a distinct basal tooth; hind claws without, middle legs broken, first tarsal joint on posterior legs flattened, scarcely as broad at tips as at base, not subparallel.

Cypophaga inermis Provancher.

1882: Le Naturaliste Canadien, v. XIII, p. 226, 229, n. 6, ♂ (*M. simplex* Prov.)

1883: Fauna Ent. Can. Hym. p. 710, 712, n. 6, ♂ (*M. simplex* Prov.)

1888: Add. Fauna Ent. Can. Hym. p. 323, n. 6, ♂, p. 462, (*M. inermis* Prov.)

1896: Dalla Torre, Cat. Hym. v. X, p. 449 (*M. simplicissima* D. T.)

This species is very closely related to *M. montivaga* Cresson and I have deemed it advisable to give a rather full description of the one specimen. The species was first named *M. simplex* by Abbé Provancher, but in 1888 he renamed it *M. inermis*, doubtless having become aware that Smith in 1853 had also described a *M. simplex*. Dalla Torre evidently overlooked this name *M. inermis* and renamed the species *M. simplicissima*.

Form subparallel; pubescence mostly white, some black hairs on upper part of cheeks near eyes and on dorsal abdominal segments where it is rather dense, pubescence of thorax white somewhat mixed with ochraceous on the dorsum, face and cheeks with long white hairs, tarsi clothed with yellowish pubescence, dorsal abdominal bands close and appressed, absent on first segment, widely interrupted on second segment (rubbed?), first and second segments clothed with a loose gray pubescence; punctuation regular and close, that on scutellum exceedingly close rather large and with the ground surface tessellated; head very broad and extending well behind the eyes, antennæ simple, with a tendency to be crenulated beneath, fuscous beneath; mandibles long, subparallel, black with a red band across outer tooth and on inner teeth at tips, 3-toothed, first tooth long and sharp, middle tooth shortest, a long, flattened, rounded and turned inward at tip, basal tooth, cheeks apparently not armed; labrum truncate at tip (in *pugnata* it is notched); tegulæ reddish-black; a central smooth slightly elevated line on anterior mesothorax, wider posteriorly and reaching almost from tegulæ to apical margin; transverse nervure interstitial; femora reddish inside; claws cleft, with an enlargement but no basal tooth; 6th dorsal segment with a prominent carina, shallowly, broadly emarginate, apical carina thin and almost obsolete, lateral teeth flattened in axial plane of body and bent inward, round at tip, 7th segment produced and with a faint emargination at tip; no coxal spines.

Redescribed from one ♀ specimen numbered 873, and recorded by Provancher.

Megachile vancouverensis Provancher. ♂.

1888: Add. Fauna Ent. Can. Hym. p. 425, n. 3, p. 457.

1896: Dalla Torre, Cat. Hym. v. X, p. 451.

In shape very much like *M. avara* Cresson, but is wider, has more pubescence on abdomen, thus making it appear grayer.

Pubescence long and white, mixed with brown on the vertex and on front of thorax almost back to tegulæ, short black hairs on outer orbits of eyes, reaching about half way from vertex to base, cheeks back of this portion have some black hairs mixed with short white ones, segments 3, 4, 5 with more or less brown or black hairs on dorsum; middle tarsi densely clothed above and hind tarsi beneath with short yellow pubescence, some black hairs above on all the tibiæ; pubescence of all the femora long and white, first four joints of tarsi fringed with long white hairs, some of which have brown tips, first joint concave, yellowish red

beneath, darker above, with the upper edge quite black, each margin fringed with short coarse brownish red hairs, second, third and fourth joints with short coarse hairs on edges, all of the joints have short flattened lobes projecting beyond the apex, claw joint ferruginous as long as three before it combined, claws black at base of cleft, tips ferruginous; anterior coxæ with well developed black spines, tipped with red, subapical spines ferruginous, trochanters and coxæ black; front and middle femora slightly swollen, all the femora reddish beneath, the first with the portion where the tibia rests when closed against it smooth and highly polished, yellowish-red, front tibiæ same color as femora, also polished and with a marginal fringe of white hairs; punctures of head and thorax rather fine and close, on abdomen sparse; antennæ black, last joint flattened but not expanded; mandibles 4-toothed, straight above, toothed below at base, black, punctured, inner and outer teeth with reddish marginal lines; clypeus with very fine punctures, edge impunctate, polished, with a central emargination and having on each side two teeth; second joint of labial palpi slightly longer than first; maxillary palpi 3-jointed, bare, basal joint broadest, a white bristle at tip of third joint, this joint tapers from base to tip; 6th dorsal abdominal segment with a compressed carina, broadly, shallowly emarginate, edges slightly broken or irregularly serrate, apical carina thin with two long rounded distant teeth, 7th segment not at all visible; cheek armed with a scale-like process.

Redescribed from one specimen numbered 1417 and reported by Provancher to have been received from "Vancouver (Taylor)." This is a very peculiar species and does not belong in *Megachile* s. str.

Anthemois addenda Cresson.

1888: Add. Fauna Can. Ent. Hym. p. 462 (*acuta* given as syn. of *latimanus*).

I have examined one ♀ labelled *Megachile acuta* and presume that the above reference is to this specimen. The specimen is numbered 1113 and also bears the number 188. It is distinctly referable to Cresson's *M. addenda*.

Anthemois infragilis Cresson.

1883: Le Naturaliste Canadien, v. XIV, p. 37, n. 5, ♂ (*Osmia frigida*).

1888: Add. Fauna Can. Ent. Hym. p. 325, ♂, 462 (*Osmia frigida*).

1896: Dalla Torre, Cat. Hym. v. X, p. 395 (*Osmia frigida*, Prov. references, ♂ only). I have examined one specimen of this species, numbered 1061 and labelled *Osmia frigida*. It is a typical specimen of Cresson's *infragilis*. Provancher in 1888, in his references to the above species on p. 324, described the female, but I have not seen the specimen nor can I recognize it from his description.

[TO BE CONTINUED.]

[ISSUED JANUARY 10, 1906.]

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OF THE

ENTOMOLOGICAL SOCIETY

WASHINGTON



Volume

DECEMBER

(Meeting of 1905)

Published Quarterly

WASHINGTON

39088069080110-64

1905.

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WASHINGTON.



Volume VII, No. 4.
DECEMBER, 1905.
(Meeting of October 5, 1905.)

Published Quarterly by the Society.
WASHINGTON, D. C.
1905.

PROCEEDINGS
OF THE
ENTOMOLOGICAL SOCIETY
OF WASHINGTON.

Published quarterly by the Society at 1238-1240 Pennsylvania Avenue, N.W., Washington, D. C. Terms for subscription, \$2.00 per annum, single numbers 60 cents. Remittances should be made payable to the Entomological Society of Washington, Address all subscriptions to the Corresponding Secretary, Mr. E. S. G. Titus, care U. S. Department of Agriculture, Washington, D. C.

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OF WASHINGTON.

VOL. VII.

DECEMBER, 1905.

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SOME NOTES ON THE PROVANCHER MEGACHILIDÆ.

BY E. S. G. TITUS.

[Continued from page 152.]

Xanthosarus vidua Smith.

1882: *Le Naturaliste Canadien*, v. XIII, p. 226, 227, n. 3, ♂ (*M. scrobiculata*); p. 226, 230, n. 8, ♀ (*M. grandis*); p. 227, 240-241, n. 10 (*M. centuncularis*).

1883: *Fauna Ent. Can. Hym.* p. 710, 711, n. 3, ♂ (*M. scrobiculata*); p. 710, 713-714, n. 8, ♀ (*M. grandis*); p. 710, 714-715, n. 19, ♀ (*M. centuncularis*);

1888: *Add. Fauna Ent. Can. Hym.* p. 462 (species as above noted).

1896: *Dalla Torre, Cat. Hym.* v. X, p. 425 (*M. centuncularis*, *Prov. references*); p. 445 (*M. scrobiculata* as syn. of *pugnata*, *Prov. references*); p. 444 (*M. grandis* under *M. pollicaris* *Prov. references*).

The specimen marked *M. grandis* is numbered 874 and the locality at present unknown. The ♂ marked *M. scrobiculata* bears the number 871 and it also has no known locality at present. One ♀ numbered 876 and labelled *M. centuncularis* is doubtless from Provancher's locality "CC." I have not added above in the references to *M. centuncularis* the following two as I have no means of knowing to what species he refers.

1877: *Le Naturaliste Canadien*, v. IX, p. 23, 95.

1886: " " " v. XVI, p. 34.

Xanthosarus melanophæa Smith.

1882: *Le Naturaliste Canadien*, v. XIII, p. 226, 228, n. 4, ♂ (*M. femorata*), p. 227, 232, n. 13, ♀ (*M. melanophæa*).

1883: Fauna Ent. Can. Hym. p. 710, 712, n. 4, ♂ (*M. femorata*); p. 710, 715-716, n. 13, ♀ (*M. melanophæa*).

1888: Add. Fauna Ent. Can. Hym. p. 462 (species as noted above).

1896: Dalla Torre, Cat. Hym. v. X, p. 420 (*M. femorata*, Prov. references); p. 438 (*M. melanophæa*, Prov. references).

1903: Friese, Zeits. Hym. Dip., v. III, p. 248 (*M. canadensis*).

The specimen labelled *M. femorata* is numbered 872, locality unknown, the ♀ labelled *M. melanophæa* is numbered 878 and is from "C."

Xanthosarus femorata Smith.

1882: Le Naturaliste Canadien, v. XIII, p. 226, No. 27, n. 1, ♂ (*M. latimanus*).

1883: Fauna Ent. Can. Hym. p. 710-711, n. 1, ♂ (*M. latimanus*).

1888: Add. Fauna Ent. Can. Hym. p. 462 (*M. latimanus*).

1896: Dalla Torre, Cat. Hym, v. X, p. 436 (*M. latimanus*, Prov. references, ♂ only).

One specimen numbered 870, labelled *M. latimanus* appears to be referable to *X. femorata* Sm. It is from either St. Hyacinth or Cap Rouge as Provancher reports the species from both localities.

I have not added above the reference to the ♀ of *latimanus* given by Provancher because I have seen no specimens so labelled.

1888: Add. Fauna Ent. Can. Hym. p. 324, n. 9, ♀ (*M. latimanus*). Nothing can be told from the description, which appears to be founded on some *Xanthosarus*.

Xanthosarus latimanus Say.

1882: Le Naturaliste Canadien, v. XIII, p. 226, 227-228, n. 2, ♂ (*M. frigida*); p. 227, 231, n. 11, ♀ (*M. mendica*).

1883: Fauna Ent. Can. Hym. p. 710, 711, n. 2, ♂ and ♀, p. 710, 715, n. 11, ♀ (as above).

1888: Add. Fauna Ent. Can. Hym. p. 462, (*M. frigida* and *M. mendica*).

1896: Dalla Torre, Cat. Hym. v. X, p. 431, ♂ (*M. frigida*, Prov. references); p. 439, ♀ (*M. mendica*, Prov. references).

Megachile frigida is reported by Provancher from St. Hyacinth and *M. mendica* from Chicoutimi. A specimen labelled *M. frigida* bears the number 1012 and one labelled *M. mendica* is numbered 1013.

Sayapis, new name for *Gnathocera* and *Ceratias* both preoccupied.

1882: Le Naturaliste Canadien, v. XIII, p. 232 (*Gnathocera*, type cephalica).

1883: Fauna Ent. Can. Hym. p. 689, 716 (Gnathocera, type cephalica).

1888: Add. Fauna Ent. Can. Hym. p. 323 (same ref.)

1896: Dalla Torre, Cat. Hym. v. X, p. 417 (as a syn. of Megachile).

1903: Robertson, Tr. Amer. Ent. Soc. v. XXIX, p. 167, -172 (Cerantias, type pugnata).

It is rather unfortunate that this genus should have had two preoccupied names given to it. *Gnathocera* was used by Kirby in 1825 for a genus of Coleoptera; *Cerantias* was used by Kroy in 1845 for a genus of Fishes.

Sayapis pugnata Say.

1882: Le Naturaliste Canadien, v. XIII, p. 233, ♀ (Gnathocera cephalica); p. 226, 228-229, n. 5, ♂, ♀ (M. pugnata).

1883: Fauna Ent. Can. Hym. p. 710, 712, n. 5, ♂ ♀ (M. pugnata); p. 716, ♀ (Gnathocera cephalica).

1888: Add. Fauna Ent. Can. Hym. p. 323, n. 5, p. 462 (makes G. cephalica a syn.).

1896: Dalla Torre, Cat. Hym. v. X, p. 445 (M. pugnata, Prov. references and G. cephalica which he makes a syn. of pugnata).

I have seen but one pair of this species, they are numbered 196 (or 961). Provancher reports the species from Cap Rouge. It is of course impossible to state which of the references are applicable to these particular specimens, but since Provancher himself made *Gnathocera cephalica* a synonym of *M. pugnata* we may feel assured that the originals were carefully compared.

OSMIINÆ.

Osmia lignaria Say.

1882: Le Naturaliste Canadien, v. XIII, p. 207-208, n. 1, ♀, ♂.

1883: Fauna Ent. Can. Hym. p. 707, 708, n. 1, ♀, ♂.

1888: Add. Fauna Ent. Can. Hym. p. 466.

1896: Dalla Torre, Cat. Hym. v. X, p. 410, ♀ (Provancher references).

I have examined ♀ ♀ numbered 867 and labelled *Osmia lignaria*. No specimens of the ♂ were seen.

Osmia simillima Sm.

1883: Fauna Ent. Can. Hym. p. 812, n. 6, ♀ (*Osmia atriventris*).

1888: Add. Fauna Ent. Can. Hym. p. 466 (*Osmia atriventris*).

1896: Dalla Torre, Cat. Hym. v. X, p. 385, ♀ (*Osmia atriventris*, Prov. references).

One ♀ specimen bearing the number 1066 and marked *Osmia atriventris* belongs to *Osmia simillima* ♀. I have had opportunity of consulting Prof. Cockerell's notes made on an examination of the type of *O. simillima* in the British Museum and am satisfied that this specimen belongs to that species. Provancher gives Toronto as the locality of capture.

Osmia atriventris Cresson.

1882: Le Naturaliste Canadien, v. XIII, p. 207, 208, n. 2, ♀ (*O. simillima* in part).

1883: Fauna Ent. Can. Hym. p. 707, 708, n. 2, ♀ (*Osmia simillima* in part).

1888: Add. Fauna Ent. Can. Hym. p. 325, ♀, p. 466, (*Osmia simillima* in part); p. 325, 329, n. 15, ♂, p. 467 (*Osmia vicina*).

1896: Dalla Torre, Cat. Hym. v. X, p. 410, ♀ (*O. simillima*, Prov. references); p. 414, ♂ (*O. vicina*, Prov. references).

A specimen numbered 1161 and labelled, not with the regular oblong label used by Provancher, but on a narrow strip, *Osmia simillima*, can be referred to this species. Provancher reports *O. simillima* from "C." A ♂ numbered 1162, and labelled *Osmia vicina* appears to be the ♂ of *atriventris*. Provancher reports *O. vicina* from Ottawa at flowers of *Cypripede*. The ♀ is also listed by Provancher in 1888 under n. 15, but I have not seen the specimen.

Osmia brevis Cresson.

1888: Add. Fauna Ent. Can. Hym. p. 324, 326, n. 8, ♀, p. 466.

1896: Dalla Torre, Cat. Hym. v. X, p. 388. (Provancher references only).

One ♀ numbered 868 and correctly determined. Reported from Cap Rouge by Provancher.

Osmia nigrifrons Cresson.

I have examined one ♀ of this species in the Provancher material numbered 1526 and labelled *O. nigrifrons*.

Melanosmia grandior Ckll. (*Osmia longula* Prov).

In the Provancher material sent me there is a ♀ numbered 1525 and 13, and labelled *Osmia longula*, which is referable to Cockerell's *O. grandior*.

Chalcosmia chalybea Smith.

1888: Add. Fauna Ent. Can. Hym. p. 325, 326, n. 10, p. 466 (*Osmia faceta*).

1896: Dalla Torre, Cat. Hym. v. X, p. 394 (*O. faceta*, Provancher references).

One ♀ specimen numbered 1160 and labelled *Osmia faceta* has been compared with Smith's description and Cockerell's MS. notes on the type of *O. chalybea* and is undoubtedly that species. Provancher records his species from Cap Rouge.

Leucosmia albiventris Cresson.

1882: Le Naturaliste Canadien, v. XIII, p. 207, 208, n. 2, ♀ (*O. simillima* in part).

1883: Fauna Ent. Can. Hym. p. 707, 708, n. 2, ♀ (*O. simillima* in part).

1888: Add. Fauna Ent. Can. Hym. p. 325, ♀, p. 466 (*O. simillima* in part); p. 325, 327, n. 11, ♀ p. 466 (*O. albiventris*).

1896: Dalla Torre, Cat. Hym. v. X, p. 384, ♀ (*O. albiventris*, Prov. references); p. 410, ♀ (*O. simillima*, Provancher references).

One ♀ numbered 1161 and labelled *Osmia simillima* is referable to this species as is also a ♀ correctly labelled and numbered 1163. *O. albiventris* is recorded by Provancher from Cap Rouge. The ♂ which he records I have not seen.

Leucosmia parvula Dalla Torre.

1882: Le Naturaliste Canadien, v. XIV, p. 37, n. 7, ♂ (*Osmia parva*).

1883: Fauna Ent. Can. Hym. p. 812, n. 7, ♂ (*O. parva*).

1888: Add. Fauna Ent. Can. Hym. p. 325, n. 7, ♂. 467 (*O. parva*).

1896: Dalla Torre, Cat. Hym. v. X, p. 405, ♂ (*O. parvula*, n. n. for *parva*).

Length 4.5 mm. Small, blue-green, legs and antennæ reddish fuscous; pubescence very white, that on face and thorax very dense, sides of abdomen fringed, first and second dorsal abdominal segments with scant pubescence, front femora and tibiæ with long white fringe, not so dense and shorter on other legs; punctuation fine and close, mandibles very dark, two-toothed, spurs dark red, tegulæ reddish; basal nervure before transverse median; claws deeply cleft; 6th and 7th dorsal abdominal segments deeply incised at apex, edge of 6th segment slightly turned up and ferruginous along the thin edge, the blue color of the segment runs out onto the points of the teeth, thus interrupting the ferruginous edge.

Redescribed from one ♂ specimen numbered 1062 and labelled *Osmia parva*. This is a very small species, very dainty in shape. No locality is given for the species. This was renamed by Dalla Torre on account of Radoszkowski's species *parva* 1874.

Monilosmia canadensis Cresson.

1888: Add. Fauna Ent. Can. Hym. p. 325, 329-330, ♂ p. 466 (*Osmia proxima*).

1896: Dalla Torre, Cat. Hym. v. X, p. 496 (*O. proxima*, Provancher references).

One ♂ specimen numbered 1164 and labelled *O. proxima*. Provancher reports the species from "Ottawa (Guignard)."

Centrosmia bucephala Cresson.

1882: Le Naturaliste Canadien, v. XIII, p. 207, 208, n. 3, ♀ (*O. lignicola*).

1883: Fauna Ent. Can. Hym. p. 707, 708, n. 2 (*O. lignicola*).

1888: Add. Fauna Ent. Can. Hym. p. 324, 466 (*O. lignicola*); p. 325, 327-328, n. 13 (*O. latitarsis*).

1896: Dalla Torre, Cat. Hym. v. X, p. 399 (*O. latitarsis*, Provancher references); p. 491, ♀ (*O. lignicola*).

The type of *O. lignicola* is numbered 965 and Provancher records it from Cap Rouge, the species *O. latitarsis* is numbered 1168, and is also from Cap Rouge.

Centrosmia tarsata Provancher.

1888: Add. Fauna Ent. Can. Hym. p. 325, 328, n. 14, ♂, p. 467 (*Osmia tarsata*).

1896: Dalla Torre, Cat. Hym. v. X, p. 412 (*Osmia tarsata*).

Length 9 mm. Rather slender, blue-black, abdomen shining blue, antennæ deep brown, head with a greenish cast in some lights, margins of all the dorsal abdominal segments brownish, polished, and not punctured, first two pairs of legs blue-black (hind legs missing) 2d ventral segment reddish with a tendency in the center of the apex towards an upraised tooth; pubescence of face white and dense, dorsum of thorax with pubescence somewhat ochraceous (has been wet and is matted on the surface), first two dorsal abdominal segments, head and pleura with white pubescence; edges of segments with scarce pubescence ochraceous and black intermixed, pubescence of legs white on tibiæ and ferruginous on tarsi; antennæ long rather slender, neither 3d nor 4th joint equals 1 + 2; mandibles polished, apical tooth very sharp; legs finely punctured, tarsi of middle legs deformed as in *C. bucephala* but are more slender and not so broadly deformed as in that species; outer spine of tibiæ long and sharp, somewhat curved, spurs dark, one much longer than the other on hind legs; 6th dorsal segment minutely emarginate in the central margin and slightly sinuate at sides, 7th segment notched sharply and deeply on apical margin, teeth pointed, 3d ventral showing in the form of lobes at the sides of and behind the 2d ventral which has a small upraised tooth on the center of its apical margin, 4th ventral with sides curved and tip broadly truncate; first submarginal cell nar-

rowed above, both recurrent nervures entering cell at about equal distances from apex and base, transverse median nervure only slightly before the basal nervure, veins brownish, wings slightly clouded.

The single ♂ is numbered 1169 and recorded by Provancher from Cap Rouge.

Nothomsia exigua (?) Cresson.

1888: Add. Fauna Can. Ent. Hym. p. 326, ♂ p. 339, 466 (*Osmia exigua*). No specimens of this species were sent for examination and it is very doubtful if the species was correctly recognized. The "*Osmia parva*" Prov. would come the nearest to the species of any specimens I have seen from Canada.

Monumetha albifrons (Kirby).

1837: W. Kirby, Fauna Bor.-Amer. v. IV, p. 270, n. 374, ♂.

1882: Le Naturaliste Canadien, v. XIII, p. 227, 240-241, n. 10 (*Megachile oblonga*).

1882: Le Naturaliste Canadien, v. XIII, p. 226, 230, n. 9, ♀ (*Megachile oblonga*).

1883: Fauna Ent. Can. Hym. p. 714, n. 9, ♀ (*Megachile oblonga*).

1888: Add. Fauna Ent. Can. Hym. p. 324, 326, n. 9, p. 467 (*Osmia oblonga*).

1896: Dalla Torre, Cat. Hym. v. X, p. 404, ♀ (*Osmia oblonga*).

There is in the Provancher collection the type of *Osmia oblonga* Prov., a single ♀ specimen numbered 962, that is a well marked specimen of Cresson's "*Monumetha argentifrons*," which species I now believe to be synonymous with Kirby's *Chelostoma albifrons*. This last named species was described from one male captured in latitude 65°, North America. I have recently examined specimens collected by Merritt Cary of the Division of Biological Survey, U. S. Department of Agriculture, at Ft. Resolution, Great Slave Lake, Mackenzie Ter., Dom. of Can., 26 June, 1903, which answers to Mr. Kirby's description so closely that I cannot do otherwise than consider them to belong to *albifrons*. Both ♀♀ and ♂♂ are represented and a comparison with other specimens of the genus *Monumetha* gives no good specific differences. It will be recalled that Mr. Cresson noticed the resemblance between his *M. borealis* (Great Slave Lake) and Kirby's species.

Monumetha imperfecta Provancher, 1896.

1896: Le Naturaliste Canadien, v. XXIII, p. 9, n. 1, ♀.

I have not seen the type of this species which was collected at Los Angeles, Cal., by Mr. D. W. Coquillett. The specimen

was sent to Abbé Provancher by Mr. Coquillett who does not now remember whether it was returned or not. From the description the species appears to be a specimen of *Monumetha albifrons* Kby.

Alcidamea simplex Cresson.

1882: Le Naturaliste Canadien, v. XIII, p. 207, 208, n. 4, ♀ (*Osmia buconis*).

1883: Fauna Ent. Can. Hym. pp. 707-708, n. 4, ♀ (*Osmia buconis*).

1888: Add. Fauna Ent. Can. Hym. p. 325, ♀ p. 466 (*Osmia buconis*).

1896: Dalla Torre, Cat. Hym. v. X, p. 388.

Specimens of this species in the Provancher collection are numbered either 869 or 698 and labelled *Osmia buconis* Say, and were reported by Abbé Provancher from Cap Rouge.

Alcidamea alboscopatum Provancher.

1888: Add. Fauna Ent. Can. Hym. p. 425, n. 2, 457, ♀ (*Heriades alboscopatum*).

1896: Dalla Torre, Cat. Hym. v. X, p. 374, ♀ (*Heriades alboscopatum*).

Length 6 mm. Black; about the size and shape of *Microstelis lateralis*, finely closely punctured, except clypeus on which the punctures are coarse; clothed with fine white pubescence, vertex of head and disk of thorax almost bare but with scattering pubescence, face, cheeks, pleura and thorax beneath thickly clothed, first tarsal joint clothed densely beneath, abdominal segments 1-4 with narrow apical hair bands, interrupted on segment 1, missing on segment 5, sides of all the segments fringed, scopa very scanty; clypeus with minute indentation in central apical margin, a tuft of hair projecting from beneath on each side, mandibles reddish at tips, two teeth only visible; antennæ fuscous beneath; legs reddish-brown (only one front leg, one middle leg minus claws, one hind leg and femora of the other present); tegulæ tinged with red, veins of wings fuscous, wings very slightly cloudy.

Redescribed from one ♀ specimen in the Provancher collection numbered 1521 and reported by Provancher from Cap Rouge.

This is a very neat little species, and is apparently a good species of *Alcidamea*. The teeth of the mandibles are not fully visible, but the wing-venation and structure of base of first abdominal segment will place it in this genus.

1888: Add. Fauna Ent. Can. Hym. p. 331-332, n. 24, p. 445, ♀, ♂ (*Alcidamea pilosifrons*). Provancher's descriptions above noted may be considered as placing the species referred to in the above reference under this species. I have not seen the specimens which he states are from "Ottawa (Harrington)."